



UW Medicine

UW SCHOOL
OF MEDICINE

CENTER FOR HEALTH EQUITY, DIVERSITY & INCLUSION

Implicit Bias: Implications for Health and Healthcare

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Pathways to Health Disparities

- Poverty
- Geography
- Health policy
- Access to health care
- Institutional characteristics
- Biological
- Individual health behavior
- Quality of care
- Discrimination

Overview

- Implicit Bias: What is it?
- How our minds work:
 - Automatic associations
 - First impressions, snap judgments
 - In-group favoritism
- Hidden discrimination
- Implicit Bias: What to do about it?

Implicit Bias: Definition

“attitudes or stereotypes that affect our understanding, decision making, and behavior, without our even realizing it”

“Implicit bias in the courtroom”, UCLA Law Review(2012) by Jerry Kang, et al.

Red Cross Water Safety Poster, 2016



<https://search.yahoo.com/yhs/search?p=red+cross+racist+poster&ei>

Red Cross Apology, June 27, 2016

“We **deeply apologize** for any misunderstanding, as it was absolutely not our intent to offend anyone. As one of the nation’s oldest and largest humanitarian organizations, we are **committed to diversity and inclusion** in all that we do, every day. To this end, we have removed the poster from our website and Swim App and have discontinued production. We have notified all of our partner aquatic facilities requesting they take down the poster. Our organization has emphasized to our partners and on social media that it was absolutely **not our intent to offend anyone** and apologized for this inadvertent action. We are currently in the process of completing a formal agreement with a diversity advocacy organization for their guidance moving forward.”

Implicit Bias

Aka: hidden bias, unconscious bias

Implicit and Explicit Beliefs

Explicit
Attitudes and
Beliefs

Can report
Rational

Higher level
thinking



Implicit
Attitudes and
Beliefs

Automatic
Hidden
Unaware

Lower level
thinking

Implicit and Explicit Beliefs Can Disagree

- Implicit and self-reported attitudes and beliefs may differ, and a person may be unaware that they hold contradictory beliefs
- Even those holding egalitarian values may hold negative implicit attitudes and beliefs

Nosek, et al., 2007, Burgess et al., 2007, Banaji & Greenwald, Dovidio & Gaerner 2000

Implicit Bias is Common

- Implicit bias is common and pervasive in the general population, in society
- Race, ethnicity, gender, weight, ability, age, sexual orientation, other areas
- MDs, other providers show bias similar to others with doctoral degrees, others in society

Nosek, et al., 2007, Sabin et al., 2009, Hill et al., 2015

Say the color of the ink for each of the items below as fast as you can

GREEN

BLUE

RED

YELLOW

BLUE

YELLOW

RED

BLUE

GREEN

YELLOW

GREEN

RED

YELLOW

GREEN

RED

YELLOW

BLUE

RED

YELLOW

BLUE

GREEN

RED

BLUE

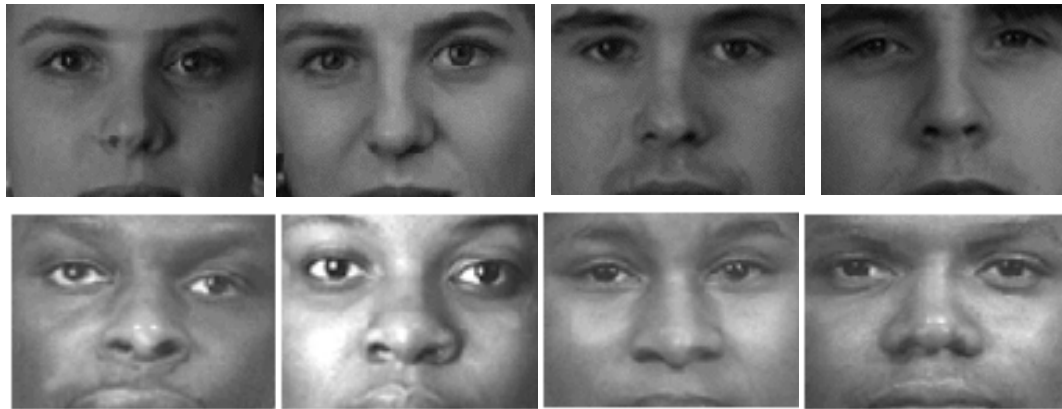
GREEN

Stroop, 1935, *Journal
of Experimental
Psychology*

Measuring Implicit Bias

The Implicit Association Test (IAT)

A widely used, indirect measure of implicit social cognition



<http://implicit.harvard.edu>

Greenwald, et al., 1998

Implicit Bias: Gender

Male versus **Female** (Ben vs. Julia)

Career versus **Family** (management vs. home)

72% of IAT test takers show male-career association rather than female-career association

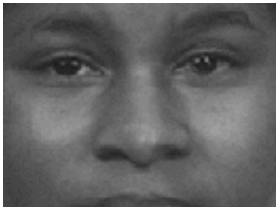
Nosek, et al., 2007

Implicit Bias: Race

If there is an association that is faster for



**with the concept of “good”
than**



with the concept of “good”

70% of IAT test takers show stronger association of White rather than Black face and concept of “good”

Nosek et al., 2007

Other Areas



Implicit Bias and Behavior

Despite egalitarian beliefs, individuals may show prejudiced behavior in certain situations:

- Clinical/other ambiguity
- Situational uncertainty
- Heavy workload
- Fatigue
- Pressure of time



Croskerry, 2001, 2010

Racial Bias is Contagious

- Just observing a biased person express subtle negative bias toward a black person may shift an individual's racial bias
- Others' biases may “creep into our minds and infect our behaviors”
- Flip side is true, can shift to positive
- We are all role models

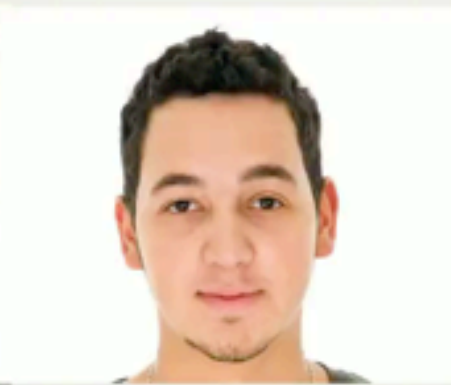
Prejudice is Contagious and so is Non Biased Behavior



<http://www.stjames-manotick.org/wp-content/uploads/2013/04/refugees.jpg>

How our Minds Work

- First impressions are made quickly (snap judgments)
- Automatic associations
- In-group favoritism
- Absorb messages from our culture



First Impressions

- First impressions of a person as attractive, likeable, competent, trustworthy, and aggressive are made quickly
- Exposure to an unknown face for one-tenth of a second was enough to judge these traits (implicitly)
- Judgment did not change with increased of one second, but confidence in the judgment increased

Willis & Todorov, 2006

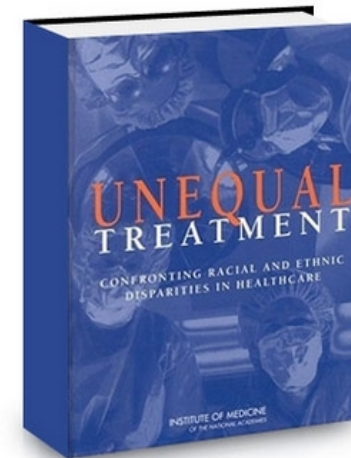
What Comes to Mind?



Implicit Bias: Hidden Discrimination

Institute of Medicine (IOM), *Unequal Treatment*, 2003

- Confirmed that racial/ethnic health care disparities exist, related to worse outcomes, and “unacceptable”
- Health care provider contribution
- Found indirect but strong evidence of discriminatory patterns in health care
- “Biases may be conscious (explicit) or unconscious (implicit), even among well intentioned”



Racial/Ethnic Health Care Disparities

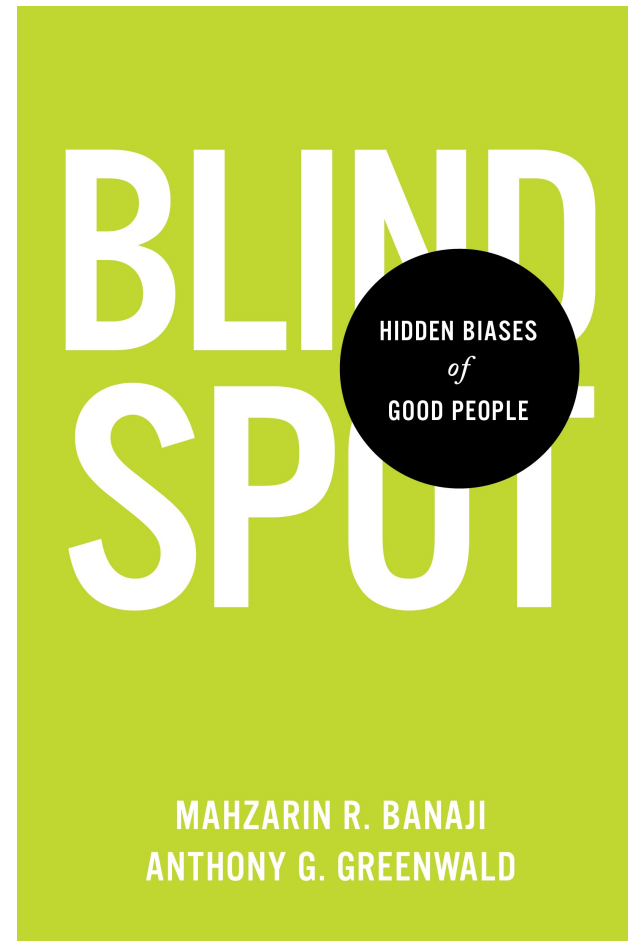
Health care disparities are racial or ethnic
“differences in the quality of health care not due to
access related factors, or clinical needs, preferences
and appropriateness of intervention”

Institute of Medicine, *Unequal Treatment*, 2003, p. 32

Carla the Quilter



- Carla, a woman in her late 20s, was rushed to the emergency room by her boyfriend
- She had cut her hand on glass bowl as it slipped to the ground and shattered



Banaji & Greenwald, 2013



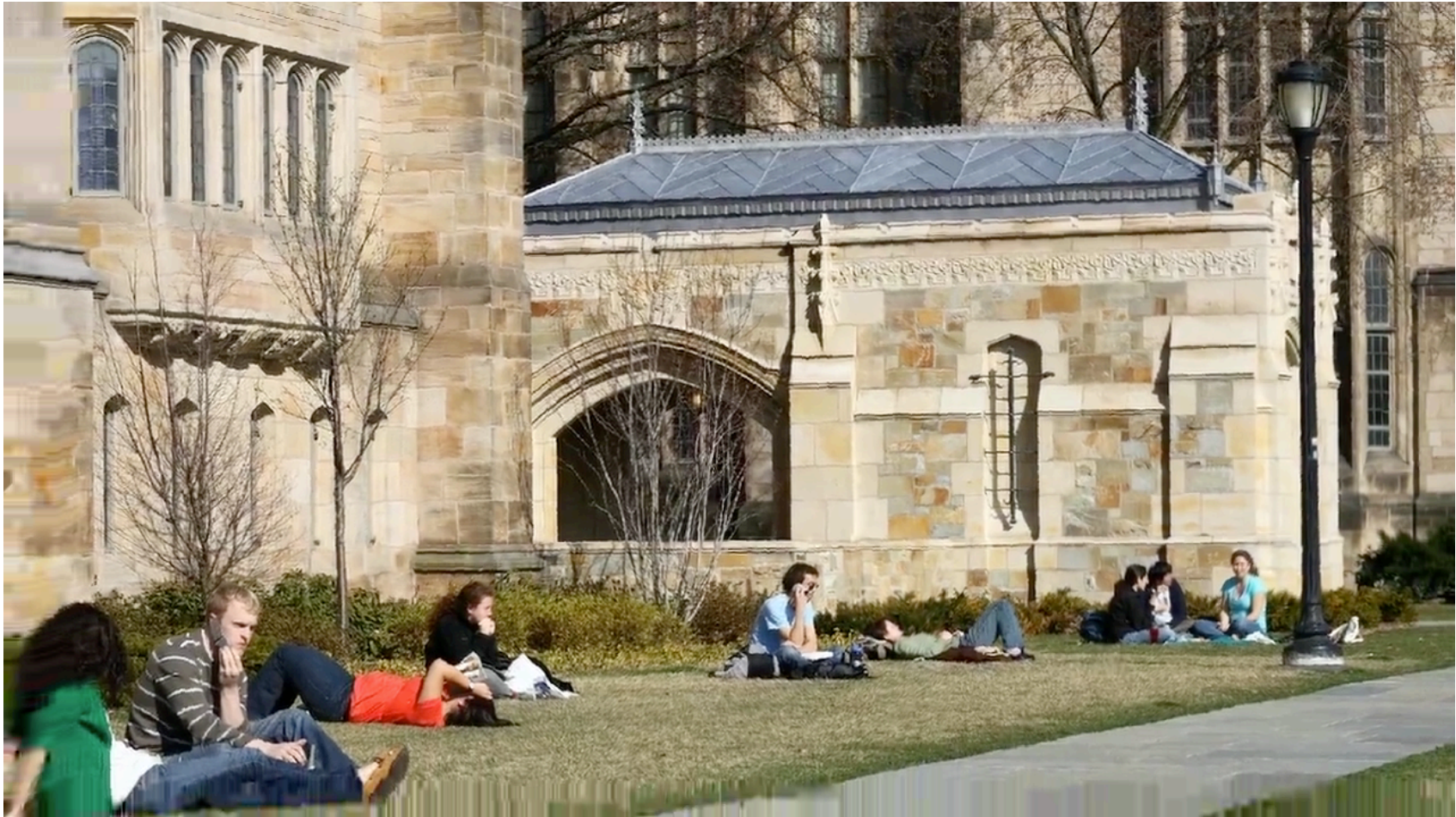
Her hand was cut from mid-palm to wrist and bleeding



BF told the ED resident that quilting was very important to Carla and worried about damage to her fine motor control



The resident stated that he was confident the hand would heal well if he could “just stitch it up quickly”



As the doctor prepared Carla's hand, a student volunteer walked by and recognized Carla, who in addition to being a quilter, was also an assistant professor at Yale



The ED doctor stopped in his tracks and said, “You are a professor at Yale?”



Within seconds Carla was headed for the surgery department and the best hand surgeon in Connecticut was called in. After hours of surgery Carla's hand was restored to pre-injury function.

Hidden Discrimination

- Carla the quilter vs. Carla the professor is a case of in-group favoritism
- Hidden discrimination- less an act of overt hostility - can be an “absence of helping”
- In-group favoritism can increase “the relative advantages of those who are already advantaged”

Greenwald, & Pettigrew, 2014, Banaji & Greenwald, *Blindspot*, 2013

Implicit Bias Health Care

A Decade of Studying Implicit Racial Bias In Health Care Providers
37 qualifying studies, 31 found evidence of pro-white bias

- 14 studied association of IB and health care outcomes, (8 no association, 6 higher bias=disparities in treatment)
- All 7 studies of IB in real world care found stronger bias= poorer patient provider communication
- 2 studies of real world outcomes, one found an association of bias with spinal cord injury patient satisfaction and depression, other area, medication intensification, not

Maina et al., May, 2017, Social Science & Medicine

Implicit Bias: Patient-Provider

Real-world clinic visits, primary care, 90% physician, 269 patients, Baltimore
For Black patients stronger clinician implicit white preference associated with:

- Lower patient positive affect
- Patients' less liking of the clinician
- Less confidence in clinician
- Lower perceived respect from clinician
- More clinician verbal dominance



Cooper, et al., AJP, 2012

Implicit Bias

- Healthcare
- Hiring
- Education/admissions/grading/test design
- Housing
- Policy
- Many areas

Interrupt Impact of Implicit Bias

Strategies to Interrupt Implicit Bias

Good intentions are not enough

- Collect data
- Monitor equity
- Value and promote diversity and inclusion
- Accountability (individual, institutional)

Interrupt Implicit Bias

- Reduce discretion- develop objective processes
- Standardize practices
- Attention to imagery
- Role modeling
- Humility
- Slow down

Why Diversity?

- Individuals competed in groups to find accurate answers in predicting stock prices
- Answers were 58% more accurate in diverse groups than in homogeneous groups
- More time spent in interacting in diverse groups = more accurate answers
- Diversity > cognitive friction, disrupts conformity = better critical thinking for all, improved error detection, more accurate answers

Levine, et al., Ethnic Diversity Deflates Price Bubbles, *Proceedings of the National Academy of Sciences* (PNAS) 2014, Diversity Makes You Brighter, Levine and Stark, NYT 12/9/2015

Managing Implicit Bias: Personal

- Become aware of own biases
- Slow down
- Feeling more comfortable with and confident in people who share one's own culture
- Be careful about decisions by “intuition”
- Elicit diverse input into decisions
- Humility

Banaji, Brazerman, Chug, 2003, AAMC 2009, Banaji Greenwald, 2013

Managing Bias: Organizational

- Collect data, i.e. disparate outcomes, workforce diversity, perceptions of constituents
- Diverse input into decisions
- Objective structured processes
- Use best practices
- Be aware of bias in hiring, admissions
- Accountability

Banaji, Brazerman, Chug, 2003, AAMC 2009

UW Courses Developed

Understand implicit bias, strategies to interrupt impact of bias, skills building

- *Health Care Disparities*: evidence disparities, understand implicit bias, skills building patient centered communication
- *Improving Health Care for Adolescents: Stereotypes and Why they Matter*: stereotyping of adolescents, understand implicit bias, improve communication
- *Implicit Bias in Clinical and Learning Environment*
- MCHB Diversity Peer Learning Collaborative: Workforce Diversity
- *Implicit Bias in Health Care*: Interprofessional Education



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Thank You!

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